

### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450

# NOTICE OF ALLOWANCE AND FEE(S) DUE

**EXAMINER** 21186 12/11/2003 BOOTH, RICHARD A SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 ART UNIT PAPER NUMBER MINNEAPOLIS, MN 55402 2812 DATE MAILED: 12/11/2003 CONFIRMATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. Leonard Forbes. 2652 08/30/2001 09/945.512 TITLE OF INVENTION: IN SERVICE PROGRAMMABLE LOGIC ARRAYS WITH LOW TUNNEL BARRIER INTERPOLY INSULATORS DATE DUE SMALL ENTITY **ISSUE FEE PUBLICATION FEE** TOTAL FEE(S) DUE APPLN. TYPE

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

\$1330

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

### HOW TO REPLY TO THIS NOTICE:

nonprovisional

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

NO

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

\$1630

03/11/2004

- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRM 09/945,512 08/30/2001 Leonard Forbes 1303.027US1 2	mailings of the accompanying drawing, must with the United in an envelope			
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)  Note: A certificate of mailing can only be used for domestic Fee(s) Transmittal. This certificate cannot be used for any other papers. Each additional paper, such as an assignment or formal have its own certificate of mailing or transmission.  SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  P.O. BOX 2938  MINNEAPOLIS, MN 55402  APPLICATION NO. FILING DATE  Note: A certificate of mailing can only be used for domestic Fee(s) Transmittal. This certificate of mailing or transmission I hereby certificate of mailing or transmission  I hereby certify that this Fee(s) Transmittal is being deposited States Postal Service with sufficient postage for first class mail addressed to the Mail Stop ISSUE FEE address above, or I transmitted to the USPTO, on the date indicated below.	I drawing, mus with the United in an envelope			
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402  APPLICATION NO. FILING DATE  FIRST NAMED INVENTOR  ATTORNEY DOCKET NO. CONFIRM  09/945,512  08/30/2001  Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited states Postal Service with sufficient postage for first class mail addressed to the Mail Stop ISSUE FEE address above, or bransmitted to the USPTO, on the date indicated below.  ATTORNEY DOCKET NO. CONFIRM  1303.027US1  2	with the United in an envelope peing facsimile			
APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRM 09/945,512 08/30/2001 Leonard Forbes 1303.027US1 2	I hereby certify that this Fee(s) Transmittal is being deposited with the Unite States Postal Service with sufficient postage for first class mail in an envelop addressed to the Mail Stop ISSUE FEE address above, or being facsimile			
09/945,512 08/30/2001 Leonard Forbes 1303.027US1 2	(Depositor's name)			
09/945,512 08/30/2001 Leonard Forbes 1303.027US1 2	(Signature)			
09/945,512 08/30/2001 Leonard Forbes 1303.027US1 2	(Date)			
<i>0.0.</i> <b>0,0. 0</b>	AATION NO.			
TITLE OF INVENTION: IN SERVICE PROGRAMMABLE LOGIC ARRAYS WITH LOW TUNNEL BARRIER INTERPOLY INSULATORS	652			
	E DUE			
nonprovisional NO \$1330 \$300 \$1630 03/1	1/2004			
EXAMINER ART UNIT CLASS-SUBCLASS				
BOOTH, RICHARD A 2812 257-321000				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  Ch	names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name			
3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.  (A) NAME OF ASSIGNEE  (B) RESIDENCE: (CITY and STATE OR COUNTRY)  Please check the appropriate assignee category or categories (will not be printed on the patent);	assignment ha			
4a. The following fee(s) are enclosed:  4b. Payment of Fee(s):				
☐ Issue Fee ☐ A check in the amount of the fee(s) is enclosed.				
□ Publication Fee □ Payment by credit card. Form PTO-2038 is attached.				
☐ Advance Order - # of Copies ☐ The Director is hereby authorized by charge the required fee(s), or credit any of Deposit Account Number (enclose an extra copy of this f	orm).			
Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above	е.			
(Authorized Signature) (Date)				
NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.  This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an				

obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS O, Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/945,512	08/30/2001	Leonard Forbes	1303.027US1	2652		
21186	7590 12/11/2003		EXAMINER			
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			BOOTH, RICHARD A			
P.O. BOX 2938 MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER		
WIII VIETI OEI	0, 1411 7 7 102	2812				
			DATE MAILED: 12/11/2003			

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/945,512	08/30/2001	Leonard Forbes	1303.027US1	2652	
21186 75	90 12/11/2003		EXAMINER		
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			BOOTH, RICHARD A		
P.O. BOX 2938 MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER	
			2812		

DATE MAILED: 12/11/2003

### Notice of Fee Increase on October 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after October 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on October 1, 2003. See Revision of Patent Fees for Fiscal Year 2004; Final Rule, 68 Fed. Reg. 41532, 41533, 41534 (July 14, 2003).

The current fee schedule is accessible from (http://www.uspto.gov/main/howtofees.htm).

If the fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due" but not the correct amount in view of the fee increase, a "Notice of Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice of Pay Balance of Issue Fee," if the response to the Notice of Allowance is to be filed on or after October 1, 2003 (or mailed with a certificate of mailing on or after October 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously-paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Effective October 1, 2003, 37 CFR 1.18 is amended by revising paragraphs (a) through (c) to read as set forth below.

Section 1.18 Patent post allowance (including issue) fees.

(a) Issue fee for issuing each original or reissue patent, except a design or plant patent:

By a small entity (Sec. 1.27(a))......\$665.00 By other than a small entity.....\$1,330.00

(b) Issue fee for issuing a design patent:

By a small entity (Sec. 1.27(a)).....\$240.00 By other than a small entity......\$480.00

(c) Issue fee for issuing a plant patent:

By a small entity (Sec. 1.27(a))......\$320.00

By other than a small entity......\$640.00

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.		Applicant(s)				
, · · · "	09/945,512		FORBES, LEONARD				
Notice of Allowability	Examiner		Art Unit	. \			
	Richard A. E	Booth	2812	NW			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.							
1. This communication is responsive to the RCE request filed	<u>1 9/22/03</u> .						
2.  The allowed claim(s) is/are <u>1-16, 28-65 and 95-104.</u>							
3. A the drawings filed on <u>30 August 2003 and 22 September 2</u>		· -					
<ol> <li>Acknowledgment is made of a claim for foreign priority un</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ol>	nder 35 U.S.C	. 9 119(a)-(u) or (i).					
<ol> <li>Certified copies of the priority documents have</li> </ol>	e been receive	ed.					
<ol><li>Certified copies of the priority documents have</li></ol>	e been receive	ed in Application No	·				
3.   Copies of the certified copies of the priority doc	cuments have	e been received in this i	national stage applica	tion from the			
International Bureau (PCT Rule 17.2(a)).							
* Certified copies not received:							
<ol> <li>Acknowledgment is made of a claim for domestic priority un reference was included in the first sentence of the specifica</li> </ol>	inder 35 U.S.C ation or in an <i>i</i>	C. § 119(e) (to a provision Application Data Sheet.	onal application) since . 37 CFR 1.78.	e a specific			
(a)   The translation of the foreign language provisional a							
<ol> <li>Acknowledgment is made of a claim for domestic priority up in the first sentence of the specification or in an Application</li> </ol>	n Data Sheet.	37 CFR 1.78.					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of $^\circ$	f this commun this application	nication to file a reply co on. THIS THREE-MON	omplying with the requ NTH PERIOD IS NOT	irements noted EXTENDABLE.			
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>	nitted. Note the es reason(s) v	e attached EXAMINER' why the oath or declara	S AMENDMENT or Nation is deficient.	IOTICE OF			
<ol> <li>CORRECTED DRAWINGS ( as "replacement sheets") mus</li> <li>(a) \( \subseteq \) including changes required by the Notice of Draftspers</li> </ol>			948) attached				
1) ☐ hereto or 2) ☐ to Paper No							
(b) $\square$ including changes required by the proposed drawing c		<del></del> '	en approved by the E				
(c) ☐ including changes required by the attached Examiner's	's Amendmen	t / Comment or in the C	office action of Paper	No			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	I.84(c)) should the margin acc	be written on the drawir ording to 37 CFR 1.121(	ngs in the front (not the d).	e back) of			
9.   DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT FOR T	osit of BIOLC	OGICAL MATERIAL r FOF BIOLOGICAL MA	nust be submitted. I TERIAL.	Note the			
Attachment(s)							
1 ☐ Notice of References Cited (PTO-892)	5[	Notice of Informal Pa	tent Application (PTC	<b>-</b> 152)			
2☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6[	Interview Summary (	PTO-413), Paper No.	·			
3⊠ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No. 16	8), 7[	☐ Examiner's Amendm	ent/Comment				
4☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	_	]Examiner's Statemer ]Other .	nt of Reasons for Allow	wance			
	`		Primary Examiner Art Unit: 2812				